

AMENDMENTS TO THE CLAIMS

1.-17. (Canceled)

18. (Currently amended) A method as recited in Claim 1720, wherein the setting step further comprises setting an operating frequency of the port adapter to the selected one of the SPI-4 bus operating frequencies.

19. (Currently amended) A method as recited in Claim 1720, wherein the setting step comprises setting the operating frequency of the host system SPI-4 bus equal to a fastest one of the SPI-4 bus operating frequencies that are supported by the port adapter.

20. (Currently amended) A method ~~as recited in Claim 17~~ of selectively determining an operating frequency for a SPI-4 bus of a host computer system that uses a port adapter, wherein the operating frequency may be different than a conventional SPI-4 bus operating frequency, the method comprising the steps of:
issuing a query from a host computer system having a SPI-4 bus to a port adapter, the port adapter comprising a SPI-4 bus that can be coupled to a host system for control and data between the host and the SPI-4 device, a control bus coupled in parallel with the SPI-4 bus between the host system and the port adapter, and interface logic that interfaces the SPI-4 bus and the control bus to one of a plurality of line interfaces, and an identification repository;
receiving, from the identification repository, an identification of the port adapter;
determining, based on the information received from the identification repository, whether the host system SPI-4 bus can operate at a frequency that is compatible with at least one of the SPI-4 bus operating frequencies that are supported by the port adapter; and
setting an operating frequency of the host system SPI-4 bus equal to a selected one of the SPI-4 bus operating frequencies that are supported by the port adapter;

18 further comprising powering-on the port adapter only when the host system SPI-4 bus
19 can operate at a frequency that is compatible with at least one of the SPI-4 bus
20 operating frequencies that are supported by the port adapter.

1 21. (Currently amended) A method as recited in Claim 1720, further comprising powering-
2 on the port adapter only when one or more factors are satisfied, wherein the factors are
3 selected from the set consisting of: the host system has software support for a packet
4 format required by the port adapter; the host system has software support for the port
5 adapter; the port adapter dissipates less than a maximum amount of power dissipation
6 allowed by the host system; the host system can match a bandwidth required by the port
7 adapter; or a license authorization requirement associated with the port adapter allows the
8 port adapter to run on the host system.

1 22. (Currently amended) A method as recited in Claim 1720, further comprising receiving,
2 from the identification repository, values that allow the host to determine whether the
3 port adapter can be supported by the host system, and one or more operating frequencies
4 of the SPI-4 bus.

1 23. (Currently amended) A method as recited in Claim 1720, further comprising receiving,
2 from the identification repository, values that allow the host to determine a packet format
3 of data that is sent across the SPI-4 bus by the port adapter.

1 24. (Currently amended) A method as recited in Claim 1720, further comprising receiving,
2 from the identification repository, one or more values specifying a packet format of data
3 that is sent across the SPI-4 bus by the port adapter.

1 25.-28. (Canceled)

1 29. (New) A computer system, comprising:
2 a host system having a SPI-4 bus coupled to a port adapter,

3 the port adapter comprising a SPI-4 bus that can be coupled to the host system for control
4 and data between the host and the SPI-4 device, a control bus coupled in parallel
5 with the SPI-4 bus between the host system and the port adapter, and interface
6 logic that interfaces the SPI-4 bus and the control bus to one of a plurality of line
7 interfaces, and an identification repository, and
8 first logic in the host system and second logic in the port adapter configured to perform
9 the steps of:
10 issuing a query from the host system to the port adapter;
11 receiving, from the identification repository, an identification of the port adapter;
12 determining, based on the information received from the identification repository,
13 whether the host system SPI-4 bus can operate at a frequency that is
14 compatible with at least one of the SPI-4 bus operating frequencies that
15 are supported by the port adapter;
16 setting an operating frequency of the host system SPI-4 bus equal to a selected
17 one of the SPI-4 bus operating frequencies that are supported by the port
18 adapter; and
19 powering-on the port adapter only when the host system SPI-4 bus can operate at
20 a frequency that is compatible with at least one of the SPI-4 bus operating
21 frequencies that are supported by the port adapter.

1 30. (New) A computer system as recited in Claim 29, wherein the logic is configured for
2 powering-on the port adapter only when one or more factors are satisfied, wherein the
3 factors are selected from the set consisting of: the host system has software support for a
4 packet format required by the port adapter; the host system has software support for the
5 port adapter; the port adapter dissipates less than a maximum amount of power
6 dissipation allowed by the host system; the host system can match a bandwidth required
7 by the port adapter; or a license authorization requirement associated with the port
8 adapter allows the port adapter to run on the host system.

1 31. (New) A computer system as recited in Claim 29, wherein the logic is configured for
2 receiving, from the identification repository, values that allow the host to determine

3 whether the port adapter can be supported by the host system, and one or more operating
4 frequencies of the SPI-4 bus.

1 32. (New) A computer system as recited in Claim 29, wherein the logic is configured for
2 receiving, from the identification repository, values that allow the host to determine a
3 packet format of data that is sent across the SPI-4 bus by the port adapter.

1 33. (New) A computer system as recited in Claim 29, wherein the logic is configured for
2 receiving, from the identification repository, one or more values specifying a packet
3 format of data that is sent across the SPI-4 bus by the port adapter.

1 34. (New) A computer system as recited in Claim 29, wherein the logic is configured
2 wherein the setting step further comprises setting an operating frequency of the port
3 adapter to the selected one of the SPI-4 bus operating frequencies.

1 35. (New) A computer system as recited in Claim 29, wherein the logic is configured
2 wherein the setting step comprises setting the operating frequency of the host system SPI-
3 4 bus equal to a fastest one of the SPI-4 bus operating frequencies that are supported by
4 the port adapter.

1 36. (New) A computer system, comprising:
2 a host system having a SPI-4 bus coupled to a port adapter,
3 the port adapter comprising a SPI-4 bus that can be coupled to the host system for control
4 and data between the host and the SPI-4 device, a control bus coupled in parallel
5 with the SPI-4 bus between the host system and the port adapter, and interface
6 logic that interfaces the SPI-4 bus and the control bus to one of a plurality of line
7 interfaces, and an identification repository;
8 first logic in the host system and second logic in the port adapter comprising:
9 means for issuing a query from the host system to the port adapter;

10 means for receiving, from the identification repository, an identification of the
11 port adapter;

12 means for determining, based on the information received from the identification
13 repository, whether the host system SPI-4 bus can operate at a frequency
14 that is compatible with at least one of the SPI-4 bus operating frequencies
15 that are supported by the port adapter;

16 means for setting an operating frequency of the host system SPI-4 bus equal to a
17 selected one of the SPI-4 bus operating frequencies that are supported by
18 the port adapter; and

19 means for powering-on the port adapter only when the host system SPI-4 bus can
20 operate at a frequency that is compatible with at least one of the SPI-4 bus
21 operating frequencies that are supported by the port adapter.

1 37. (New) A computer system as recited in Claim 36, wherein the logic comprises means for
2 powering-on the port adapter only when one or more factors are satisfied, wherein the
3 factors are selected from the set consisting of: the host system has software support for a
4 packet format required by the port adapter; the host system has software support for the
5 port adapter; the port adapter dissipates less than a maximum amount of power
6 dissipation allowed by the host system; the host system can match a bandwidth required
7 by the port adapter; or a license authorization requirement associated with the port
8 adapter allows the port adapter to run on the host system.

1 38. (New) A computer system as recited in Claim 36, wherein the logic comprises means for
2 receiving, from the identification repository, values that allow the host to determine
3 whether the port adapter can be supported by the host system, and one or more operating
4 frequencies of the SPI-4 bus.

1 39. (New) A computer system as recited in Claim 36, wherein the logic comprises means for
2 receiving, from the identification repository, values that allow the host to determine a
3 packet format of data that is sent across the SPI-4 bus by the port adapter.

- 1 40. (New) A computer system as recited in Claim 36, wherein the logic comprises means for
2 receiving, from the identification repository, one or more values specifying a packet
3 format of data that is sent across the SPI-4 bus by the port adapter.
- 1 41. (New) A computer system as recited in Claim 36, wherein the logic comprises means for
2 setting an operating frequency of the port adapter to the selected one of the SPI-4 bus
3 operating frequencies.
- 1 42. (New) A computer system as recited in Claim 36, wherein the logic comprises means for
2 setting the operating frequency of the host system SPI-4 bus equal to a fastest one of the
3 SPI-4 bus operating frequencies that are supported by the port adapter.